





PRELIMINARY ISSUE

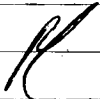


Work Order ID 64159





Thursday, November 25, 2010 4:01:39 PM

Page 1

Item ID:	D4298-009	Accept		Setup	Start	
Revision ID:	PRELIM				Stop	
Item Name:	Plate					
Start Date:	11/25/2010	Start Qty:	1.00		Cust Item ID:	
Required Date:	12/3/2010	Req'd Qty:	1.00		Customer:	
Reference:						



Approvals:	Process Plan:		Date:	10-11-26	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4298	PA1 Rev A 								
100		0.00							
	FLOW WATER JET								
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg								
6061 .090	Dwg Rev: PA1								
	Prog Rev: PA1								
	2-Deburr if necessary								
110		0.00							
	QC2- Inspect parts off machine FAI/FAIB								
QC	Memo	0.00							
Quality Control									
120		0.00							
	QC8- Inspect parts - second check								
QC	Memo	0.00							
Quality Control									

HB 10-12-1
HB 10-12-3 ①

①

Pho →





HB 10-12-1
HB 10-12-3

0.00 - Swirl log ①
0.00 inspection to Eng Dg
-009

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____


NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/12/02	# 110	Qty x1 Part (the only one) scrap hole was drilled in the incorrect location R.C. operator READ Dwg incorrectly		-Scrap + Destroy Refuse m# 116268	10/12/03	S 10/12/03		S 10/12/02
		Lack of Attention AND Program were wrong		-Fix Program	10.12.02			S 10/12/02



NOTE: Date & initial all entries




Work Order ID 64159

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Required Date:	12/3/2010	Req'd Qty:	1.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 		0.00							
Small Fab	Memo	0.00							
Small Fab	1- C'sink holes as per rivet size and dwg, deburr								
140 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
150 	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish	Memo	0.00							
Hand Finishing									

ES 10/12/08 ①

*- inspect to end of
- 0.1
8/11/2008 (+)*

=> JH 10/12/09

1 *1*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 64159

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Page 3

Item ID: D4298-009	Accept		Setup Start	
Revision ID: PRELIM			Stop	
Item Name: Plate				
Start Date: 11/25/2010	Start Qty: 1.00		Cust Item ID:	
Required Date: 12/3/2010	Req'd Qty: 1.00		Customer:	
Reference:				

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run Start	
	QC:	Date:	SPC (Y/N):	Date:	Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
155 Powdercoat Powder Coating	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3 <i>112588</i> Memo POWDER COAT Start Time: <i>9:05</i> Oven Temperature: <i>320</i> Finish Time: <i>9:35</i>	0.00 0.00				<i>1</i>	<i>12</i>	<i>10-12-9,</i>	
160 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00	<i>all</i>	<i>10/02/09</i>		<i>1</i>	<i>0</i>		
170 Packaging Packaging	Identify as per dwg & Stock Location: <i>GA</i> <i>B 6464</i> Memo	0.00 0.00	<i>So</i>	<i>10/12/10</i>		<i>(1)</i>			

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 64159

Thursday, November 25, 2010 4:01:39 PM

Page 4

Item ID: D4298-009

Accept

Revision ID: PRELIM

Item Name: Plate

Setup Start

Stop

Start Date: 11/25/2010 Start Qty: 1.00

Required Date: 12/3/2010 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

2/10/12-10

POSITIVE RECALL

EFFECTIVE 10.11.29

AUTH *AA*RELEASED *J*

DATE 10/12/17

X1
ASSEMBLED

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, November 25, 2010 4:01:43 PM

Work Order ID: 64159

Parent Item: D4298-009

Parent Item Name: Plate





Start Date: 11/25/2010

Required Date: 12/3/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.11.24 new issue DD Verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.080		Purchased	No				sf	7.4150	0.03875	0.040789			
													
6061-T6 .080 Sheet													

1810-12-1

Location

Loc Qty

Loc Code

MAT

7.415

115689

7.415

116268

115689

116268 1810-12-3

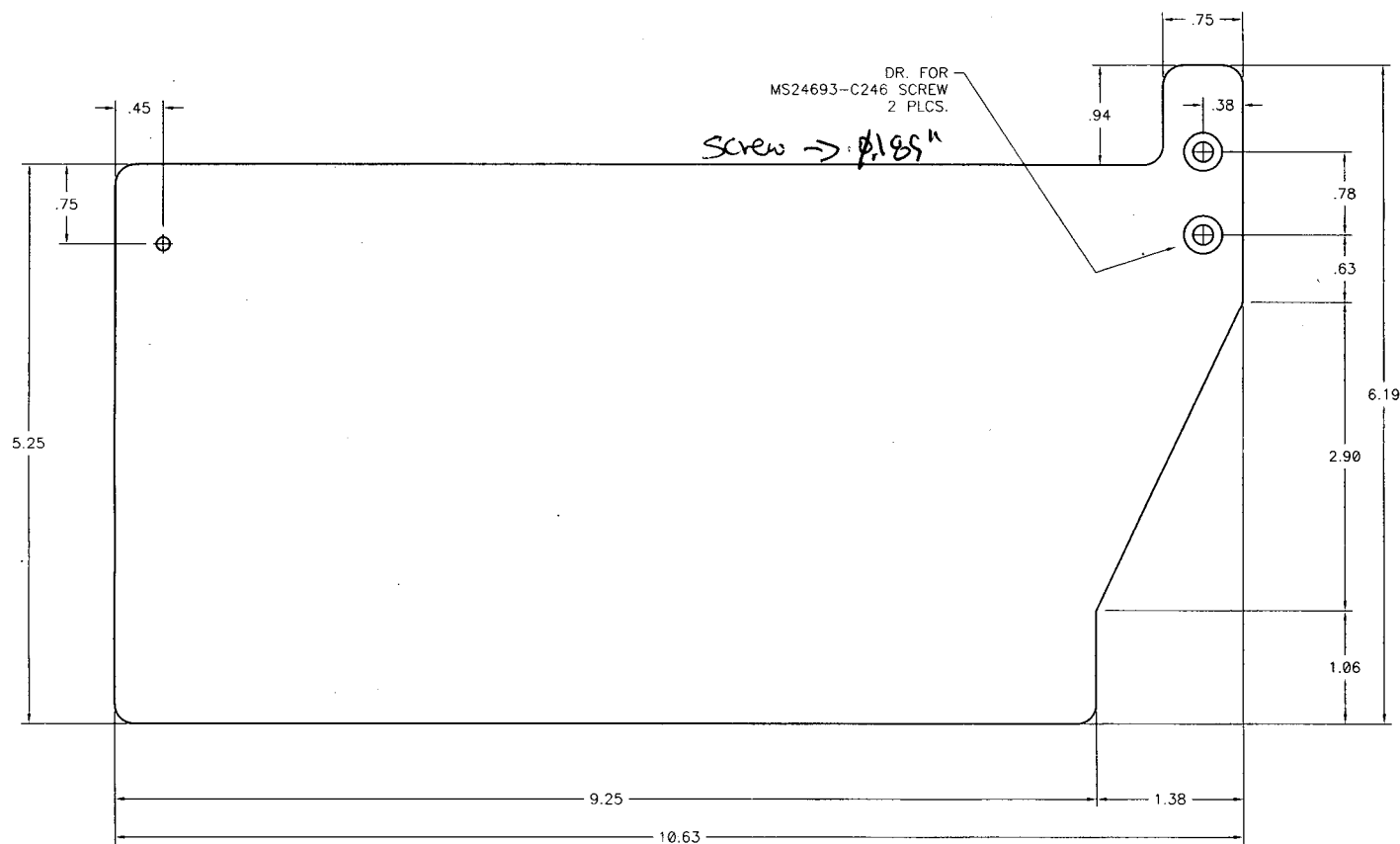
W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



-009 PLATE

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 64159

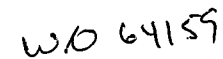
BP 10-11-26

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Era Helicopters LLC

TITLE	SIZE	DWG. NO.	REV.
SINGLE PILOT VFR CHART HOLDER, AW139	C	13939-1-290 SHT 5 OF 10	A



RE	

DART P/N	ERA P/N	Description
D4298-001	13939-1-290-001	CHART HOLDER ASSY
D4298-002	13939-1-290-002	PLATE SUB-ASSY
D4298-003	13939-1-290-003	PLATE SUB-ASSY
D4298-004	13939-1-290-004	FIXING BRACKET SUB-ASSY
D4298-005	13939-1-290-005	HINGE SUB-ASSY
D4298-006	13939-1-290-006	MACHINED INNER SUB-ASSY
D4298-007	13939-1-290-007	MACHINED OUTER SUB-ASSY
D4298-008	13939-1-290-008	PLATE
D4298-009	13939-1-290-009	PLATE
D4298-010	13939-1-290-010	FIXING BRACKET
D4298-011	13939-1-290-011	HINGE
D4298-012	13939-1-290-012	HINGE
D4298-013	13939-1-290-013	HINGE
D4298-014	13939-1-290-014	HINGE
D4298-015	13939-1-290-015	CLIP ANGLE
D4298-016	13939-1-290-016	CLIP STOP
D4298-017	13939-1-290-017	CLIP STOP MOUNT
D4298-018	13939-1-290-018	MACHINED INNER
D4298-019	13939-1-290-019	MACHINED OUTER
D4298-020	13939-1-290-020	KNOB
D4298-021	13939-1-290-021	MACHINE BOLT
D4298-022	13939-1-290-022	PIN TOPPER
D4298-023	13939-1-290-023	PIN
D4298-024	13939-1-290-024	SERRATED ADJUSTMENT WASHER

20624159

RELEASED
2010-12-15
W

A	NEW ISSUE	SC	10.12.15
REV.	DESCRIPTION		BY DATE
DESIGN	SC	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SC		
CHECKED	<i>W</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>W</i>	D4298	SHEET 1 OF 1
APPROVED	<i>W</i>	TITLE	SCALE
DE APPR.	<i>W</i>	CHART HOLDER (AW 139)	NTS
DATE	10.12.15	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

Eric Charbonneau

From: Domingue, Elvin [edomingue@erahelicopters.com]
Sent: November 24, 2010 1:48 PM
To: Nelson, David; 'echarbonneau@dartaero.com'
Subject: Re: DXF files (AW139 Chart Holder)

Yes that would be perfect!

Elvin Domingue
Sent from my BlackBerry Wireless Device

From: Nelson, David
To: 'Eric Charbonneau' <echarbonneau@dartaero.com>
Cc: Domingue, Elvin
Sent: Wed Nov 24 12:37:04 2010
Subject: RE: DXF files (AW139 Chart Holder)
Eric,

That sounds okay to me, but I'll fwd to Elvin Domingue on this.

Elvin, does this finish sound okay for the AW139 Chart Holder?

Thanks,
David

From: Eric Charbonneau [<mailto:echarbonneau@dartaero.com>]
Sent: Wednesday, November 24, 2010 12:10 PM
To: Nelson, David
Subject: RE: DXF files

Thanks David, at the same time would you know what kind of finish is required on the assembly, most of our interior parts we alodine and then powder coat black sandtex, this black is satin and prevent any glare. If this is what you would like please let me know, or fwd this to whoever can help me out with this.

Thank,
Eric

From: Nelson, David [<mailto:dnelson@erahelicopters.com>]
Sent: November 24, 2010 11:53 AM
To: 'Eric Charbonneau'
Subject: RE: DXF files

Here you go.

Thanks,
David

From: Eric Charbonneau [<mailto:echarbonneau@dartaero.com>]
Sent: Wednesday, November 24, 2010 10:11 AM